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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,511	02/16/2001	Shoji Hinata	9319S-000190	5367

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EXAMINER

PARKER, KENNETH

ART UNIT PAPER NUMBER

2871

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/785,511

Applicant(s)

HINATA, SHOJI

Examiner

Kenneth A Parker

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 May 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 9-12, 15-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 4 and 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

What is meant by an aperture being “partially opened” cannot be determined. It is presumed to mean that there is an aperture, as an aperture is an opening, but meant to read more broadly. However, as what would meet the limitations defined beyond a mere aperture cannot be determined, these claims are indefinite.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Morokawa e US Patent #4824213.**

Morokawa discloses a liquid crystal device with ITO electrodes and a superposed ladder shaped relatively higher conductivity material which reaches to the terminals (col.

5, lines 40-57 and col. 6, lines 29-44). The ITO windows areas and their respective frames can be construed as the "display electrodes", and the terminals as the wirings. The lower resistance portions around the ITO windows are narrower than the ITO portions. Boths of these sections have the double layer structure. The wires run are "routed" along the edge in that each terminal is located on the edge, and therefore "routed" along the edge. Therefore, these claims are anticipated by Morokawa.

**Claims 1-4, 6, 8 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Taniguchi et al US Patent #5187604.**

Taniguchi et al discloses a liquid crystal device with ITO pixel electrodes and ITO metal superposed layers forming the terminals (abstract). As the terminals are part of the peripheral wirings, they meet the comprising language associated with the wirings. The liquid crystal is "encapsulated" between the substrates(col. 3, lines 24-30). The pixel electrodes are opposite the counter electrode, and connected to the bus lines through transistors, the bus lines connecting to the "wirings". The metals listed for the conductor that stack with the ITO in the terminal region have a lower resistance than ITO. Displays are electronic devices, so the language of claim 8 is met. The width of the wirings metal sections are narrower than that of the pixels. Therefore, these claims are anticipated by the reference.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al US Patent #5187604.**

Claim 13 is as claim 14, however with a 2 terminal device and a striped electrode on the opposite substrate. Lacking is the device being a two terminal device or the stripe electrodes. Two terminal devices employ strip electrodes and were well known for low cost fabrication. Therefore it would have been obvious to one of ordinary skill to use a two terminal device with striped electrodes with the striped opposite substrate in place of a three terminal device for the benefit of low cost.

***Allowable Subject Matter***

Claim 7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Election/Restrictions***

The restriction presented in the previous office action inadvertently listed claims 12-13 in the device group, instead of claims 13-14. As claim 12 is clearly a method claim, and as claim 14 is clearly a device claim, the correct listing is clearly 13-14. Additionally, claim 14 is listed as the second occurrence of claim 13. The claim will be discussed herein as claim 14, not "claim 13, second occurrence"

Applicant's election with traverse of group 1 in Paper No. 8 is acknowledged. The traversal is on the ground(s) that there would be no burden. This is not found persuasive because the searches for any group not required for other groups would have had to be done for those groups in addition to those searches required for those groups.

The requirement is still deemed proper and is therefore made FINAL.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Several of the reference have electrodes having different forms of being "routed" along the side of the substrates, which can be combined with Taniguchi or Aoki to include the ITO in the terminal portion or along the length of the bus lines.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Parker whose telephone number is 703-305-6202. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.

Kenneth A Parker  
Primary Examiner  
Art Unit 2871

July 14, 2003